

**IOWA DEPARTMENT OF NATURAL RESOURCES  
ADMINISTRATIVE CONSENT ORDER**

IN THE MATTER OF:

**GOLDEN GRAIN ENERGY, LLC**

ADMINISTRATIVE CONSENT ORDER

NO 2012-AQ-18

TO: Golden Grain Energy, LLC  
Chad Kuhlert, Chief Operations Officer  
1822 43<sup>rd</sup> Street SW  
Mason City, Iowa 50401

Golden Grain Energy, LLC  
Walter Wendland, Registered Agent  
1822 43<sup>rd</sup> Street SW  
Mason City, Iowa 50401

**I. SUMMARY**

This administrative consent order is entered into between the Iowa Department of Natural Resources (DNR) and Golden Grain Energy, LLC (Golden Grain) for the purpose of resolving air quality violations. In the interest of avoiding litigation, the parties have agreed to the provisions below.

Any questions regarding this administrative consent order should be directed to:

**Relating to technical requirements:**

Bryan Bunton  
Iowa Department of Natural Resources  
Air Quality Bureau  
7900 Hickman Road, Suite 1  
Windsor Heights, Iowa 50324  
Phone: 515-281-0363

**Relating to legal requirements:**

Anne Preziosi, Attorney for the DNR  
Iowa Department of Natural Resources  
7900 Hickman Road, Suite 1  
Windsor Heights, Iowa 50324  
Phone: 515-281-6243

**Payment of penalty to:**

Director of the Iowa DNR  
Wallace State Office Building  
502 East Ninth Street  
Des Moines, Iowa 50319-0034

**II. JURISDICTION**

This administrative order is issued pursuant to the provisions of Iowa Code sections 455B 134(9) and 455B 138(1) which authorize the Director to issue any order necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division II (air quality), and the rules promulgated or permits issued pursuant to that part; and Iowa Code section 455B 109 and 567 Iowa Administrative Code (IAC) chapter 10, which authorize the Director to assess administrative penalties.

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**III. STATEMENT OF FACTS**

1. Golden Grain is an ethanol production facility located in Mason City, Iowa. Golden Grain employs approximately 45 people and has the capacity to produce 100 million gallons of ethanol per year. The facility began operation in 2004. In addition to ethanol, Golden Grain produces both wet and dry distillers grains as byproducts. Air emission sources at this facility include grain unloading, hammermills, fermenters, cooling towers, dryers, flares, and storage tanks. Golden Grain exceeded emission limits contained in three of its air quality construction permits and in its Title V operating permit.

2. Air Quality Construction Permit No. 03-A-600P-S2 was issued to Golden Grain on April 19, 2006, for Emission Point (EP) S10a (DDGS Dryers). Condition 10 of the permit specifies that NOx emissions shall not exceed 8.36 lb/hr. The 4<sup>th</sup> Quarter 2010 Predictive Emissions Monitoring System report shows that EP S10a exceeded the 8.36 lb/hr NOx permit limit for 800 hours, or 36.9% of the operating time for the quarter. Additionally, the 1<sup>st</sup> Quarter 2011 Predictive Emissions Monitoring System report shows that EP S10a exceeded the same permit limit for 174 hours, or 8.3% of the operating time for the quarter.

3. Air Quality Construction Permit No. 05-A-780P was issued to Golden Grain on April 19, 2006, for EP S10b (DDGS Dryers). Condition 10 of the permit specifies that NOx emissions shall not exceed 0.04 lb/MMBtu. The 4<sup>th</sup> Quarter 2010 Predictive Emissions Monitoring System report shows that EP S10b was out of compliance with the 0.04 lb/MMBtu NOx emission limit for 168 hours, or 7.7% of the operating time for the quarter. Additionally, the 1<sup>st</sup> Quarter 2011 Predictive Emissions Monitoring System report shows EP S10b was out of compliance with the same limit for 240 hours, or 11.5% of the operating time for the quarter. Permit No. 05-A-780P-S1 was issued to Golden Grain on October 7, 2011, for the EP S10B, and it contains the same 0.04 lb/MMBtu NOx emission limit.

4. On January 31, 2011, DNR received the 4<sup>th</sup> Quarter 2010 Predictive Emissions Monitoring System report from Golden Grain. On February 9, 2011, DNR issued a Notice of Violation letter to Golden Grain for the reported 4<sup>th</sup> Quarter 2010 NOx emission exceedences. On March 1, 2011, Golden Grain submitted a response to the Notice of Violation letter, stating that corrective actions had been taken to prevent further violations of its NOx emission limits. On April 27, 2011, DNR received the 1<sup>st</sup> Quarter 2011 Predictive Emissions Monitoring System report from Golden Grain. The report showed continuing violations. On May 18, 2011, DNR issued a Notice of Violation letter to Golden Grain for the reported 1<sup>st</sup> Quarter 2011 NOx emission exceedences.

5. Air Quality Construction Permit No. 05-A-783P-S1 was issued to Golden Grain on July 31, 2007, for Emission Unit EP S70b (DDGS Cooler Cyclone). Condition 10 of the permit specifies that acetaldehyde emissions may not exceed 0.135 lbs/hr. According to the stack test report received DNR on January 29, 2010, for the testing conducted November 25, 2009, EP S70b was in violation of its 0.135 lbs/hr acetaldehyde limit. The value found was 0.201 lbs/hr. A Notice of Violation letter was issued to Golden Grain on February 10, 2010, for this emission limit violation. On March 15, 2010, Golden Grain submitted a construction permit application requesting to increase its 0.135 lbs/hr

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acetaldehyde limit on EP S70b Permit No 05-A-783P-S2 was issued on October 7, 2011, resetting the acetaldehyde emission limit to 0.26 lb/hr.

6 Title V operating permit 09-TV-002, issued to Golden Grain on March 10, 2009, also contains the emissions limits stated in the construction permits issued to Golden Grain. Therefore, these construction permit violations also are violations of its Title V operating permit

7 Golden Grain has taken corrective action to comply with its NOx limits, including the review of Predictive Emissions Monitoring System emissions on a frequent basis, adding alarms to the data collection system (DCS), increased employee training, and working with the DCS software engineer to build controls on the DCS for controlling oxygen levels in the combustion units. The 2<sup>nd</sup> Quarter 2011 Predictive Emissions Monitoring System report has been reviewed and shows the facility in compliance with its NOx emission limits greater than 95% of the time

**IV. CONCLUSIONS OF LAW**

1. Pursuant to the provisions of Iowa Code sections 455B.134(9) and 455B.138(1), which authorize the Director to issue any order necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division II (air quality), and the rules promulgated and permits issued pursuant thereto; and Iowa Code section 455B.109 and 567 Iowa Administrative Code (IAC) chapter 10, which authorize the Director to assess administrative penalties, this Department has jurisdiction to issue this order

2 Iowa Code section 455B.133 provides for the Environmental Protection Commission (Commission) to establish rules governing the quality of air and emission standards. The Commission has adopted 567 Iowa Administrative Code chapters 20-35 relating to air quality

3 Pursuant to Iowa Code sections 455B.133 and 455B.134(3)(a), 567 IAC 22.1(1) requires that a person who constructs, installs, or reconstructs or alters equipment or control equipment must first obtain an air quality construction permit from the DNR, unless an exemption applies. Pursuant to Iowa Code section 455B.133, 567 IAC 22.3(2) authorizes permits to be issued subject to written conditions, including emission limits. Golden Grain has failed to comply with the conditions of its air quality construction permits

4 According to Iowa Code section 455B.133(8), the Commission shall adopt rules requiring the owner or operator of an air contaminant source to obtain an operating permit, if applicable, pursuant to Title V of the Clean Air Act. According to the provisions of 567 IAC 22.104, no source may operate after the time that it is required to submit a timely and complete application, except in compliance with a properly issued Title V operating permit

5 According to the provisions of 567 IAC 22.108, each Title V operating permit shall include emissions limitations and standards, including those operational requirements and limitations that ensure compliance with all applicable requirements at the time of permit

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issuance Therefore, the Title V permit issued to Golden Grain also includes the emission limits contained in air quality construction permits issued to Golden Grain. In violating its air quality construction permits, Golden Grain also has violated the corresponding Title V permitted emission limits

**V. ORDER**

THEREFORE, DNR orders and Golden Grain agrees to the following:

- 1 In the future, Golden Grain shall comply with the requirements of its air quality construction permits and Title V operating permit; and
- 2 Golden Grain shall pay a penalty of \$5,750.00. Twenty-five percent of this penalty amount, or \$1,437.50, shall be paid to the DNR within 30 days of the date the Director signs this administrative consent order. In lieu of payment of the remaining \$4,312.50 to DNR, Golden Grain shall conduct a Supplemental Environmental Project (SEP) by making a payment of \$4,312.50 to the Cerro Gordo County Conservation Board within 30 days of the date the Director signs this administrative consent order. Once the payment to the Cerro Gordo County Conservation Board is made, Golden Grain shall submit a receipt of payment to DNR Legal Services at the following address:

Anne Preziosi, Attorney for the DNR  
Iowa Department of Natural Resources  
7900 Hickman Road, Suite 1  
Windsor Heights, Iowa 50324

**VI. PENALTY**

Pursuant to the provisions of Iowa Code section 455B.109 and 567 IAC chapter 10, which authorize the Director to assess administrative penalties, a penalty of \$5,750.00 is assessed by this administrative consent order. The penalty must be paid within 30 days of the date this order is signed by the Director. The administrative penalty is determined as follows:

Iowa Code section 455B.146 authorizes the assessment of civil penalties of up to \$10,000.00 per day of violation for the air quality violations involved in this matter. More serious criminal sanctions are also available pursuant to Iowa Code section 455B.146A.

Iowa Code section 455B.109 authorizes the Commission to establish by rule a schedule of civil penalties up to \$10,000.00 that may be assessed administratively. The Commission has adopted this schedule with procedures and criteria for assessment of penalties through 567 IAC chapter 10. Pursuant to this rule, DNR has determined that the most effective and efficient means of addressing the above-cited violations is the issuance of an administrative consent order with a penalty. The administrative penalty assessed by this order is determined as follows:

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Economic Benefit - Golden Grain received little or no economic benefit over other facilities that comply with the emission limits set forth in their Title V or construction permits. After DNR pointed out the issues to Golden Grain, Golden Grain implemented tools designed to provide information about the NOx emission in lbs/hr to its operators. Therefore, no amount is assessed for this factor.

Gravity of the Violation - Actual harm to the environment may have occurred due to the amount of pollutants that were emitted above the emission limits set forth in construction permits 05-A-780P, 03-A-600P-S2, and 05-A-783P-S1, and in Title V operating permit 09-TV-002. The 4<sup>th</sup> Quarter 2010 Predictive Emissions Monitoring System report shows that EP S10a exceeded the 8.36 lb/hr NOx limit for 800 hours, or 36.9% of the operating time for the quarter. In addition, EP S10b was out of compliance with the 0.04 lb/MMBtu NOx limit for 168 hours, or 7.7% of the operating time for the quarter. The 1<sup>st</sup> Quarter 2011 Predictive Emissions Monitoring System report shows that the same NOx emission limits were once again exceeded. Specifically, EP S10a exceeded the 8.36 lb/hr NOx limit for 174 hours, or 8.3% of the operating time for the quarter. In addition, EP S10b was out of compliance with the 0.04 lb/MMBtu NOx limit for 240 hours, or 11.5% of the operating time for the quarter. According to the stack test report received January 29, 2010, for the testing conducted November 25, 2009, EP S70b (DDGS Cooler Cyclone) was in violation of its 0.135 lbs/hr acetaldehyde limit. The value found was 0.201 lbs/hr. For the reasons stated above, \$4,750.00 is assessed for this factor.

Culpability - Although Golden Grain did eventually take corrective action to mitigate the excess NOx emissions occurring from its DDGS Dryers, at least five months of excess emissions had occurred before the corrective actions remedied the situation. Therefore the duration of these violations is significant. In addition, Golden Grain is familiar with DNR's air quality rules, as the facility has been in operation since 2004 and in possession of a Title V operating permit since March 10, 2009. Golden Grain thus displays negligence in this case. For this reason, \$1,000.00 is assessed for this factor.

## VII. WAIVER OF APPEAL RIGHTS

This administrative consent order is entered into knowingly and with the consent of Golden Grain. For that reason, Golden Grain waives its rights to appeal this order or any part thereof.

## VIII. NONCOMPLIANCE

Failure to comply with this administrative consent order, including failure to timely pay any penalty, may result in the imposition of further administrative penalties or referral to the attorney general to obtain injunctive relief and civil penalties pursuant to Iowa Code section 455B.146. Compliance with Section "V. Order" of this administrative consent order constitutes full satisfaction of all requirements pertaining to the specific violations described in Section "IV. Conclusions of Law" of this administrative consent order.

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Chuck Gipp  
Chuck Gipp, DIRECTOR  
Iowa Department of Natural Resources

Dated this 25<sup>th</sup> day of  
June, 2012

Walter Wendland  
Golden Grain Energy, LLC

Dated this 11 day of  
June, 2012

Facility No 17-01-100; Anne Preziosi; DNR Field Office 2; VII A 2